

Form PTO-1449 (MODIFIED)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 047003-0108		SERIAL NO. 09/627,522	
<div style="display: flex; justify-content: space-between;"> <div style="text-align: left;"> <p><b>INFORMATION DISCLOSURE CITATION</b></p> <p>(Use several sheets if necessary)</p> </div> <div style="text-align: right;"> <p><b>APPLICANT</b> Tayler et al.</p> </div> </div>				FILING DATE 06/22/1999		GROUP ART UNIT 1745	

OIP  
JUL 30 2001  
PATENT & TRADEMARK OFFICE

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
JO		3,867,200	02/18/75	Daniels, Jr.			
		3,890,160	06/17/75	Daniels, Jr.			
		3,945,097	03/23/76	Daniels, Jr. et al.			
		3,947,936	04/06/76	Wheaddon			
		4,125,690	11/14/78	Bagshaw et al.			
		4,228,580	10/21/80	Matter			
		4,279,977	07/21/81	Matter			
		4,342,343	08/03/82	Clague et al.			
		4,358,518	11/09/82	Matter			
		4,534,091	08/13/85	Kline			
	6,117,594	09/12/00	Taylor et al.				
JO		6,210,837	04/03/01	Bauer et al.			

FOREIGN PATENT DOCUMENTS								
	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION	
							YES	NO
JO		DE 3045683	06/09/82	Germany				
		EP 0 506 323	09/30/92	Europe				
		EP 0 959 059	11/24/99	Europe				
		EP 0 969 108	01/05/00	Europe				
		GB 712 798	07/28/54	Great Britain - UK				
		JP 54 058624	05/11/79	Japan				
		JP 60 220561	11/05/85	Japan				
		WO 98/48468	10/29/98	PCT				
JO		WO 00/00651	01/06/00	PCT				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	
JO	Mao, Larsen and Rao, J. Electrochem. Soc., Vol. 120 No. 1, pp. 11-17, bearing a designation of "January 1973" (7 sheets)

EXAMINER <div style="text-align: center; font-size: 1.5em;">JO</div>	DATE CONSIDERED <div style="text-align: center; font-size: 1.5em;">10/01</div>
---	---

\* EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include any copy of this form with next communication to applicant.

Form PTO-1449 (MODIFIED)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 047003-0108	SERIAL NO. 09/627,522
<div style="text-align: center;"> <b>INFORMATION DISCLOSURE CITATION</b>  <i>(Use several sheets if necessary)</i> </div>		APPLICANT Tayler et al.	
		FILING DATE 06/22/1999	GROUP ART UNIT 1745
<b>OTHER DOCUMENTS</b> (Including Author, Title, Date, Pertinent Pages, Etc.)			
JO		Prengaman, The Battery Man, Vol. 39 No. 4, pp. 23-31,	
		bearing a designation of "April 1997" (8 sheets)	
JO		Prengaman, J. Power Sources, No. 53, pp. 207-14,	
		bearing a designation of "© 1995" (8 sheets) NO MONTH	
JO		Prengaman, Ullmann's Encyclopedia of Industrial Chemistry, 5th edition, Vol. A15, pp. 237-47, ✓	
		bearing a designation of "1990" (11 sheets) NO MONTH	
JO		Takahashi, Yasuda, Yonezu and Okamoto, J. Power Sources, No. 42, pp. 221-30,	
		bearing a designation of "(1993)" (10 sheets) NO MONTH	
JO		Declaration of Rao, p. 4, for U.S. Patent Application Serial No. 07/852,803 (1 sheet) 12/13/99	
JO		Declaration of M. Eric Taylor, dated 11/16/00 (5 sheets) ✓	
JO		Grid cracking study, bearing a designation of "5.6.01" (2 sheets) 5/6/01 ✓	
		Search report for European Patent Application. No. 99111286.3, titled ALLOY FOR BATTERY GRIDS, filed	
		06/10/99, by inventors Taylor, Korinek, Hansen and Tönnessen, dated 07/22/99 (2 sheets)	
		Search report for International Application No. PCT/US99/13381, titled ALLOY FOR BATTERY GRIDS, filed	
		06/14/99, by inventors Taylor, Korinek, Hansen and Toennessen, dated 09/21/99 (3 sheets)	
		U.S. Patent Application Serial No. 09/105,162, titled ALLOY FOR BATTERY GRIDS, as filed 06/26/98,	
		by inventors Taylor, Korinek, Hansen and Toennessen (39 sheets)	
JO		U.S. Patent Application Serial No. 09/696,109, titled ALLOY FOR BATTERY GRIDS, as filed 06/22/99,	
		by inventors Bauer, Taylor and Toennessen (39 sheets)	
JO		<del>Declaration of M. Eric Taylor dated April 6, 2000</del>	

J. Dene 10/01



Sheet 1 of 2

Form PTO-1449  
(Rev. 2-88)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
510553.90940SERIAL NO.  
09/627,522INFORMATION DISCLOSURE STATEMENT  
BY APPLICANTAPPLICANT  
M. Eric Taylor *et al.*FILING DATE  
July 28, 2000GROUP  
1745

(Use several sheets if necessary)

## U.S. PATENT DOCUMENTS

* EXAMINER'S INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
to	<del>3,953,244</del>	<del>04/27/76</del>	<del>Prengaman</del>	<del>148</del>	<del>2</del>	
to	<del>5,093,970</del>	<del>03/10/92</del>	<del>Senoo et al.</del>	<del>20</del>	<del>2</del>	
	<del>5,120,620</del>	<del>06/09/92</del>	<del>Nelson et al.</del>	<del>420</del>	<del>225</del>	
	<del>5,126,217</del>	<del>06/30/92</del>	<del>Rao</del>	<del>429</del>	<del>149</del>	
	<del>5,128,218</del>	<del>07/07/92</del>	<del>Hokunaga et al.</del>	<del>420</del>	<del>57</del>	
	<del>5,298,350</del>	<del>03/29/94</del>	<del>Rao</del>	<del>429</del>	<del>245</del>	
	<del>5,434,025</del>	<del>07/18/95</del>	<del>Rao et al.</del>	<del>429</del>	<del>245</del>	
	<del>5,691,087</del>	<del>11/25/97</del>	<del>Rao et al.</del>	<del>420</del>	<del>245</del>	
to	<del>5,834,141</del>	<del>11/10/98</del>	<del>Anderson et al.</del>	<del>429</del>	<del>245</del>	

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
to	<del>DE 27 58 940</del>	<del>07/05/79</del>	<del>Germany</del>				X
to	<del>EP 0 684 792 A1</del>	<del>11/06/98</del>	<del>EPO</del>				
to	EP 0 655 792 A1	5-31-95	EPO				
to	WO 98/50972	11/12/98	PCT				

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

to		<del>English Abstract for German Patent No. DE 27 58 940</del>
to		<del>Borchers and Assmann, Z. Metallkunde 69 (1978), pages 43-49</del>
to		D. Prengaman, 7th Int. Lead Conf. Pb'80, pages 34-47, (1980).
to		<del>H. Gless in Proc. Symp. Advances in Lead Acid Batteries 84-14, Electrochemical Soc. (1984).</del>
to		N.-Y. Tang <i>et al.</i> , 6th Asian Battery Conference (1995).
to		<del>N.E. Bagshaw, Journal of Power Sources 53 (1993), pages 25-30.</del>

EXAMINER

J. Dax

DATE CONSIDERED

5/02

\* EXAMINER: Initial if a citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449  
(Rev. 2-88)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
510553.90940SERIAL NO.  
09/627,522INFORMATION DISCLOSURE STATEMENT  
BY APPLICANTAPPLICANT  
M. Eric Taylor *et al.*FILING DATE  
July 28, 2000GROUP  
1745

(Use several sheets if necessary)

## U.S. PATENT DOCUMENTS

* EXAMINER'S INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
yo	<del>5,874,186</del>	<del>2/23/99</del>	<del>Rao et al.</del>	<del>429</del>	<del>242</del>	
yo	<del>4,939,051</del>	<del>7/3/90</del>	<del>Yasuda et al.</del>	<del>429</del>	<del>245</del>	
yo	<del>4,092,462</del>	<del>5/30/79</del>	<del>Cicco et al.</del>	<del>429</del>		

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
yo	<del>1300023</del>	<del>11/28/73</del>	<del>Great Britain</del>				
yo	<del>1400339</del>	<del>7/9/79</del>	<del>Great Britain</del>				
yo	<del>2101563</del>	<del>2/1/74</del>	<del>France</del>				X

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

yo		<del>English Abstract for French Patent No. 2191563</del>
yo		<del>L. Bouirden et al., Journal of Power Sources 33 (1991), pages 27-56</del>
yo		<del>R. Prengaman, Journal of Power Sources 67 (1997), pages 267-278</del>
yo		<del>R. Miraglio et al., Journal of Power Sources 53 (1995), pages 53-61</del>
yo		<del>P. Simon et al., Journal of Power Sources 50 (1994), pages 141-152</del>
yo		<del>European Search Report dated 7/28/99 for EP Application No. 99 11 1286</del>

EXAMINER

DATE CONSIDERED

\* EXAMINER: Initial if a citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449  
(Rev. 2-88)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
510553.90940SERIAL NO.  
Continuation of  
09/337,830INFORMATION DISCLOSURE STATEMENT  
BY APPLICANTAPPLICANT  
M. Eric Taylor et al.FILING DATE  
July 28, 2000GROUP  
1745

(Use several sheets if necessary)

## U.S. PATENT DOCUMENTS

* EXAMINER'S INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
JO	3,953,244	04/27/76	Prengaman	148	2	
	5,093,970	03/10/92	Senoo et al.	29	2	
	5,120,620	06/09/92	Nelson et al.	429	225	
	5,126,217	06/30/92	Rao	429	149	
	5,128,218	07/07/92	Tokunaga et al.	429	57	
	5,298,350	03/29/94	Rao	429	245	
	5,434,025	07/18/95	Rao et al.	429	245	
	5,691,087	11/25/97	Rao et al.	429	245	
JO	5,834,141	11/10/98	Anderson et al.	429	245	

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
JO	DE 27 58 940	07/05/79	Germany				X
JO	EP 0 884 792 A1	11/06/98	EPO				
JO	<del>PCT/US98/000000</del>	<del>01/29/99</del>	<del>PCT</del>				

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

JO	Assmann and Borchers, Z. Metallkunde 69 (1978), pages 43-49.
JO	<del>Prengaman 7th Int. Lead Conf. Pb 80, pages 34-47,</del>
JO	H. Giess in Proc. Symp. Advances in Lead Acid Batteries 84-14, Electrochemical Soc. (1984).
JO	Gene Valeriote, (1995) 6th Asian Battery Conference.
JO	N.E. Bagshaw, J. Power Sources, 53 (1995), pages 25-30.

EXAMINER

DATE CONSIDERED

\* EXAMINER: Initial if a citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<b>Form PTO-1449</b> (Rev. 2-88)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. <b>510553.90940</b>		SERIAL NO. Continuation of <b>09/337,830</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use several sheets if necessary)</i>				APPLICANT <b>M. Eric Taylor et al.</b>		FILING DATE <b>July 28, 2000</b>	
				GROUP <b>1745</b>			

U.S. PATENT DOCUMENTS							
* EXAMINER'S INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
JD	5,874,186	2-23-99	Rao et al.	429	242		
JD	4,939,051	7-3-90	Yasuda et al.	429	245		
JD	4,092,462	5-30-78	Giess et al.	429	—		

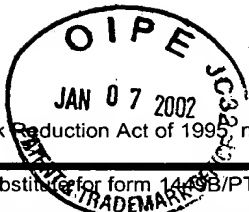
FOREIGN PATENT DOCUMENTS							
EXAMINER'S INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
JD	1338823	11-28-73	Great Britain	—	—		
JD	1400339	7-9-75	Great Britain	—	—		
JD	2191563	2/1/74	France	—	—		X

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	
JD	Bouirden, Hilger and Hertz, J. Power Sources 33 (1991), pages 27-50.
JD	J. Power Sources 67, (1997) 267-278,
JD	Miraglio et al., J. Power Sources 53, (1995), pages 53-60.
JD	P. Simon, N. Bui and F. Dabosi, J. Power Sources, 50 (1994), pages 141-152.
JD	International Search Report dated 7-28-1999 for EP Application No. 99 11 1286

EXAMINER <i>JD</i>	DATE CONSIDERED <i>5/02</i>
--------------------	-----------------------------

\* EXAMINER: Initial if a citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO  
**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

Date Submitted: December 19, 2001

(use as many sheets as necessary)

Sheet 1 of 1

**Complete if Known**

Application Number	09/627,522
Filing Date	07/28/2000
First Named Inventor	M. Eric Taylor et al.
Group Art Unit	1745
Examiner Name	Tracy Dove
Attorney Docket Number	054821-0110

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
		/				

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
			/					

**OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
JD	A1	Declaration of Purushothama Rao dated "11/19/92" from U.S. Patent Application No. 07/852,803 (3 sheets).	
JD	A2	Declaration of Purushothama Rao dated "July 22, 93" from U.S. Patent Application No. 07/852,803 (28 sheets).	
JD	A3	Declaration of M. Eric Taylor dated "4/6/00" (3 sheets).	
		/	

RECEIVED  
JAN 14 2002  
TC 1700

Examiner Signature	<i>JDove</i>	Date Considered	5/02
--------------------	--------------	-----------------	------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

<sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		Application Number	09/627,522
		Filing Date	07/28/2000
Date Submitted: March 28, 2002		First Named Inventor	Taylor et al.
		Group Art Unit	1745
(use as many sheets as necessary)		Examiner Name	Tracy Dove
		Attorney Docket Number	054821-0110
Sheet	1	of	1

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document Number	Kind Code <sup>2</sup> (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
TD	6	6,114,067		Knauer	9-5-2000	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>

Examiner Signature	<i>TDove</i>	Date Considered	6/10/02
--------------------	--------------	-----------------	---------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

<sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.